

REMARKS

The specification has been amended so that the specification conforms to the specification as filed in the parent application. The Greek symbols in the present application have been corrected so that they are the same as in the parent.

Claims 1-2 were rejected as anticipated by WATANABE et al. 6,259,503. The claims avoid this rejection and reconsideration and withdrawal of the rejection are respectfully requested.

By way of background, the claims are directed to embodiments of the present invention in which the alignment angle of the liquid crystal molecules over the thin film transistor (TFT) does not change when an electric field is generated between the source and drain of the TFT. As explained in the application (e.g., page 9, lines 9-16), the inventor found that the changing alignment of the molecules over the TFT in the prior art contributed to residual images that remained on the display after the display was turned OFF. The claims propose a display that solves this problem by aligning the electric field of the TFT so as to avoid application of a force to the molecules over the TFT that would cause them to change alignment. To this end, the electric field generated by the source and drain of the TFT is parallel or perpendicular to the initial non-zero alignment (e.g., rubbing) angle of the molecules in the liquid crystal layer or the alignment of the molecules in the layer over the TFT

can be different from the alignment of the molecules in the remainder of the layer.

The Official Action points to Figure 11 of WATANABE et al. for the embodiment of claims 1 and 2. These claims provide that the initial alignment angle (the rubbing direction) is a non-zero angle relative to a common longitudinal axis of the pixel and common electrodes. This is illustrated, by way of example, in Figure 4 of the present application in which the initial alignment angle (ϕ) is not zero and is the same as the angle (θ) at which the electric field is generated between the source 22 and drain 20. However, WATANABE et al. disclose that the rubbing direction is parallel to (makes a zero angle with) the common longitudinal axis of the pixel and common electrodes (vertical in Figure 11) and thus these claims avoid the rejection under §102.

The Official Action states that the initial alignment angle in WATANABE et al. is 90° (not zero) relative to the common longitudinal axis, but does not explain how Figure 11 is being interpreted. This is not believed to be correct because the common longitudinal axis in Figure 11 is parallel to the rubbing direction shown by the arrow (0°). See also, column 6, lines 24-30 in which the orientation of the LC molecules in the rubbing direction is explained.

Dependent claim 2 provides further distinguishing features not found in WATANABE et al. For example, the reference

does not disclose that the source and drain electrodes have facing edges that are parallel to each other and perpendicular to the non-zero initial alignment angle as in claim 2.

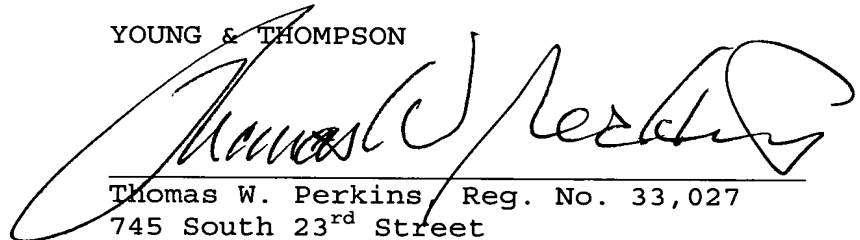
Allowance of claims 1-2 is accordingly requested. Since claim 1 is generic and since withdrawn claims 3-8 depend from claim 1, claims 3-8 should be allowable in the present application with claim 1.

In view of the present amendment and the foregoing remarks, it is believed that the present application has been placed in condition for allowance. Reconsideration and allowance are respectfully requested.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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